What is claimed is:

1. A method for determining the presence of antibodies to HIV in a body fluid, comprising:

(a) contacting under conditions which permit immunospecific binding to form a reaction mixture the body fluid with a composition containing at least one polypeptide or protein comprising the following amino acid sequences where oligopeptides having at least six amino acids which come within the sequence of at least one of the following polypeptide sequences will include epitopes within such sequence:

(I) BRU124E

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(II) BRU124EX

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124F1X

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-Ile-Lys-Y-Z

(IV) BRU124F3X

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

(V) ROD 124E1

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(X) POL2A1

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Ile-Ile-Pro-Arg-Arg-Lys-
Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH_2 group of the polypeptide or an additional amino acid bonded to the amino terminal NH_2 group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH_2; wherein W is either a H of the amino terminal NH_2 group of the polypeptide or an additional amino acid bonded to the amino terminal NH_2 group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH_2;

(b) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

2. The method according to claim 1 in which the polypeptide is conjugated to a carrier macromolecule.

3. The method according to claim 1 in which the polypeptide is immobilized.

4. The method according to claim 1 in which the immunospecific binding is detected by immunoprecipitation.

5. The method according to claim 1 in which the composition includes at least one polypeptide selected from a polymerase protein of HIV-1 and one selected from a polymerase protein of HIV-2.

6. The method according to claim 1 in which the polypeptide is modified by the substitution, addition or deletion of amino acid residues so that the modified polypeptide retains substantially all of the immunological reactivity of the unmodified polypeptide.

7. The method of claim 6 in which the immunological reactivity is measured by a method selected from the group consisting of radioimmunoprecipitation, immunofluorescence, and enzyme-linked immunosorbant assay.

8. The method according to claim 1 in which immunospecific binding between the polypeptide or protein and the antibody component of the body fluid is detected by:

(i) removing unbound components from immune complexes formed in the immunoreaction mixture;

(ii) adding a labeled antibody to the immunoreaction mixture, the labeled antibody being capable of immunospecifically binding to a component of the immune complexes and the label providing a detectable signal; and

(iii) determining whether the labeled antibody binds to the immune complexes.

9. The method according to claim 8 in which the label comprises an enzyme which is detected by the addition of the enzyme substrate.

10. The method according to claim 8 in which the label comprises a radiolabel.

11. The method according to claim 8 in which the label comprises a fluorescent label.

12. A method for determining the presence of antibodies to HIV-1 in a body fluid, comprising:

(a) contacting under conditions which permit immunospecific binding to form a reaction mixture the body fluid with a composition containing at least one polypeptide or protein comprising the following amino acid sequences where oligopeptides having at least six amino acids which come within the sequence of the following polypeptide sequence will include epitopes within such sequence:

(I) BRU124E

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(II) BRU124EX

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-Ile-Lys-Y-Z

(IV) BRU124F3X

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

wherein W is either a H of the amino terminal NH_2 group of the polypeptide or an additional amino acid bonded to the amino terminal NH_2 group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH_2;

(b) determining whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which the detection of immunospecific binding indicates the presence of antibodies to HIV in the body fluid.

13. A method for determining the presence of antibodies to HIV-2 in a body fluid, comprising:

(a) contacting under conditions which permit immunospecific binding to form a reaction mixture the body fluid with a composition containing at least one polypeptide or protein comprising the following amino acid sequences where oligopeptides having at least six amino acids which come within the sequence of at least one of the following polypeptide sequences will include epitopes within such sequence:

(V) ROD 124E1

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-
Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-
Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-
Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-
Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-
Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-
Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(X) POL2A1

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Ile-Ile-Pro-Arg-Arg-Lys-
Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH_2 group of the polypeptide or an additional amino acid bonded to the amino terminal NH_2 group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH_2;

(b) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which the detection of immunospecific binding indicates the presence of antibodies to HIV in the body fluid.

14. A polypeptide composition, immunoreactive to antibodies to HIV, comprising at least one of the following amino acid sequences:

(I) BRU124E

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(II) BRU124EX

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124F1X

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-Ile-Lys-Y-Z

(IV) BRU124F3X

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

(V) ROD 124E1

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-
Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-
Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-
Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(X) POL2A1

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-
Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-
Thr-Asp-Ile-Lys-Ile-Ile-Pro-Arg-Arg-Lys-
Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-
Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-
Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-
Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH_2 group of the polypeptide or an additional amino acid bonded to the amino terminal NH_2 group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH2 and wherein amino acids in the sequence may be inserted, deleted and substituted so long as immunoreactivity to antibodies to HIV is retained.

15. The polypeptide combination of claim 14, wherein said polypeptide has formula (I) BRU124E

16. The polypeptide combination of claim 14, wherein said polypeptide has formula (II) BRU24EX.

17. The polypeptide combination of claim 14, wherein said polypeptide has formula (III) BRU124F1X.

18. The polypeptide combination of claim 14, wherein said polypeptide has formula (IV) BRU124F3X.

19. The polypeptide combination of claim 14, wherein said polypeptide has formula (V) ROD124E1.

20. The polypeptide combination of claim 14, wherein said polypeptide has formula (VI) ROD124EX.

21. The polypeptide combination of claim 14, wherein said polypeptide has formula (VII) ROD124C2X.

22. The polypeptide combination of claim 14, wherein said polypeptide has formula (VIII) ROD124C1X.

23. The polypeptide combination of claim 14, wherein said polypeptide has formula (IX) ROD123C3X.

24. The polypeptide combination of claim 14, wherein said polypeptide has formula (X) POL2A1.

25. The polypeptide combination of claim 14, wherein said polypeptide has formula (XI) ROD124C5X.

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